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## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NUMBER YPL-0078 SERIAL NUMBER 10/770,092 FILED 2-2-2004  
FIRST INVENTOR: Tae-jin AHN TITLE APPARATUS AND METHOD FOR ENCODING  
DNA SEQUENCE, AND COMPUTER READABLE MEDIUM

EXAMINER NYA ART UNIT 1631

1.  Applicant submits herewith a copy of (a) attached form PTO-1449, which lists all patents, publications, applications, or other information submitted for consideration by the Office; (b) a legible copy of each document required by 37 C.F.R. §1.98(b)(2).
2.  Applicant herein apprises the Patent Office of references cited in a parent U.S. application from which this application obtains the benefit of an earlier filing date under 35 U.S.C. §120. The Serial Number of the parent application is U.S. Application \_\_\_\_\_ filed \_\_\_\_\_ and entitled \_\_\_\_\_. The publications cited therein are listed on attached Form PTO-1449. In accordance with 37 C.F.R. §1.98(d) copies of the listed publications are not required.  Additional parent patent applications are listed on an attached sheet.
3.  In accordance with 37 C.F.R. §1.98(a)(3), Applicant hereby certifies that for each reference not in English (check at least one box below):  
 A copy of a translation of one or more non-English document, or portion thereof, is provided herewith;  
 A concise explanation is (check at least one box below):  
 provided in the accompanying foreign or international search report;  incorporated into the specification; and/or  provided herewith.

### 37 C.F.R. §1.97(b)(1), (b)(2) – WITHIN 3 MONTHS OF FILING OR ENTRY IN NATIONAL STAGE

4.  Since this Information Disclosure Statement is being filed within three months of the filing date of the subject application or within three months of the date of entry of the national stage as set forth in 37 C.F.R. §1.491 in an international application, no fee or certification under 37 C.F.R. §1.97(e) is required.

### 37 C.F.R. §1.97(b)(3), (b)(4) – PRIOR TO MAILING OF FIRST OFFICE ACTION OR FIRST ACTION AFTER REQUEST FOR CONTINUED EXAMINATION

5.  Since this Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits, or before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. §1.114, no fee or certification under 37 C.F.R. §1.97(e) is required.

### 37 C.F.R. §1.97(c) – AFTER FIRST ACTION, BEFORE FINAL ACTION OR ALLOWANCE

6.  Since this Information Disclosure Statement is being filed outside of the period provided for in 37 C.F.R. §1.97(b), but before the mailing date of a Final Rejection or Notice of Allowance, this submission is being accompanied by (one of the following boxes must be checked):
  - a.  the fee required under 37 C.F.R. §1.97(c)(2) and specified in 37 C.F.R. §1.17(p).
  - b.  the statement specified in 37 C.F.R. §1.97(e) (Box 8 or 9 must be checked).

### 37 C.F.R. §1.97(d) – AFTER FINAL REJECTION OR ALLOWANCE

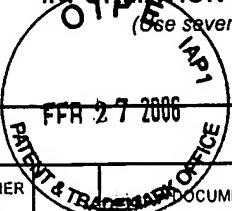
7.  Since this Information Disclosure Statement is being filed after the period specified in 37 C.F.R. §1.97(c), but on or before payment of the issue fee and is accompanied by both the statement specified in 37 C.F.R. §1.97(e) and the fee set forth in 37 C.F.R. §1.17(p). (Box 8 or 9 must be checked.)
8.  In accordance with 37 C.F.R. §1.97(e)(1), Applicant's attorney certifies that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.  The foreign or international search report(s) is/are enclosed.
9.  In accordance with 37 C.F.R. §1.97(e)(2), Applicant's attorney certifies that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing of the information disclosure statement.
10.  In the event the Commissioner of Patents deems that any additional fee is required under 37 C.F.R. §§ 1.16 or 1.17 in connection with this application, Applicant's attorneys authorize that such fee be charged to Deposit Account No. 06-1130.
11. Consideration of this Information Disclosure Statement is respectfully requested.

Name:	<u>Amy J. Bizon-Copp</u>		Registration Number	<u>53,993</u>
Signature	<u>Amy J. Bizon-Copp</u>		Date	<u>February 22, 2006</u>

CERTIFICATE OF MAILING OR TRANSMISSION: I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or [ ] facsimile transmitted to the U.S. Patent and Trademark Office to Facsimile No. \_\_\_\_\_ on the date shown below.

Name:	<u>Shenita Carroll</u>		Date	<u>February 22, 2006</u>
Signature	<u>Shenita Carroll</u>		Date	<u>February 22, 2006</u>



<b>INFORMATION DISCLOSURE CITATION</b> <small>(Use several sheets if necessary)</small>			ATTY DOCKET NO. <b>YPL-0078</b>	APPLICATION NO. <b>10/770,092</b>		
			APPLICANT(S) <b>Tae-jin AHN</b>			
			FILING DATE <b>February 2, 2004</b>	GROUP ART UNIT <b>1631</b>		
<b>U.S. PATENT DOCUMENTS</b>						
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<b>U.S. PATENT APPLICATION PUBLICATIONS</b>						
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<b>FOREIGN PATENT DOCUMENTS</b>						
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES
	WO 99/01940	1-14-1999	PCT			NO
	WO 01/80431 A1	10-25-2001	PCT			
<b>OTHER DOCUMENTS</b> <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>						
		<b>"A NEW CHALLENGE FOR COMPRESSION ALGORITHMS: GENETIC SEQUENCES"</b> ; Authors: Stephanie Grumbach and Fariza Tahli; <i>Information Processing and Management</i> , Vol. 30, No. 6; Pages 875-886 (1994)				
		<b>"DNACompress: fast and effective DNA sequence compression"</b> ; Authors: Xin Chen, Ming Li, Bin Ma, and John Tromp; <i>BIOINFORMATICS APPLICATIONS NOTE</i> , Vol. 18, No.12; Pages 1696-1698; (2002)				
EXAMINER			DATE CONSIDERED			
<small>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small>						

<b>INFORMATION DISCLOSURE CITATION</b> <i>(Use several sheets if necessary)</i>		Docket Number (Optional) <b>YPL-0078</b>	Application Number <b>10/770,092</b>
		Applicant(s) <b>Tae-jin AHN</b>	Filing Date <b>February 2, 2004</b>
<b>*EXAMINER INITIAL</b>	<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>		
	<b>"A Compression Algorithm for DNA Sequences"; Authors: Xin Chen, Sam Kwong, and Ming Li; ENGINEERING IN MEDICINE AND BIOLOGY; Pages 61-66 (2001)</b>		
	<b>"Detection of significant patterns by compression algorithms: the case of approximate tandem repeats in DNA sequences"; Authors: E. Rivals, O. Delgrange, J.-P. Delahaye, M. Dauchet, M.-O. Delorme, A. Henaut, and E. Olliver; Oxford University Press Vol.13, No. 2; Pages 131-136 (1997)</b>		
	<b>"Biological Sequence Compression Algorithms"; Authors: Toshiko Matsumoto, Kunihiro Sadakane, and Hiroshi Imai; Genome Informatics Vol. 11; Pages 43-52 (2000)</b>		
	<b>"Natural sequence code representations for compression and rapid searching of human-genome style databases"; Authors: B. Robson and P.-J. Greaney; Oxford University Press Vol. 8, No. 3; Pages 283-289 (1992)</b>		
	<b>EUROPEAN SEARCH REPORT for Application No.: 04002314.5-2201; Date of completion of search: December 21, 2005</b>		
<b>EXAMINER</b>	<b>DATE CONSIDERED</b>		

**\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.**